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THE ESTIMATED COST FOR THIS REQUEST IS 146.64 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L4 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:145564 CAPLUS

DOCUMENT NUMBER: 150:202899

TITLE: Monolayer electrophotographic photoreceptor, its
manufacture, image-forming apparatus and process
cartridge

INVENTOR(S): Tamoto, Nozomu; Tanaka, Chiaki; Shimada, Tomoyuki;
Kimura, Michio; Yanagawa, Yoshiteru; Tone, Tetsuya;
Tada, Hiromi

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 75pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2009025382	A	20090205	JP 2007-185840	20070717
PRIORITY APPLN. INFO.:			JP 2007-185840	20070717

AB The monolayer photoreceptor is manufactured by the steps of (1) forming a cured resin layer by reacting (A) a compound without charge-transporting structure and (B) a compound with charge-transporting structure, and (2) contacting the cured resin layer with a supercrit. or subcrit. fluid containing a charge-generating agent and ≥ 1 of hole or electron-transporting agent. Tandem-type electrophotog. apparatus using the photoreceptor is claimed. The photoreceptor shows good mech. and elec. static durability and gives clear images in repeated copying.

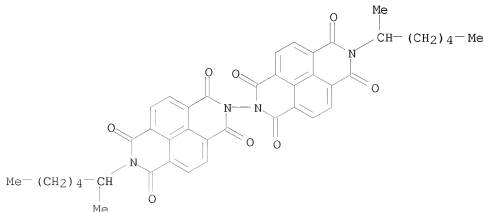
IT 866142-07-6 1108145-64-7

RL: TEM (Technical or engineered material use); USES (Uses)

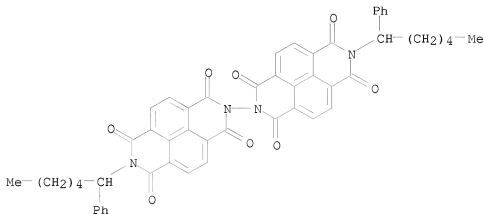
(electron-transporting agent; monolayer electrophotog. photoreceptor
manufactured by contacting cured resin with charge-transporting group with
super critical fluid containing charge-generating agent and hole or
electron-transporting agent)

RN 866142-07-6 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzol[1mm][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-
octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



RN 1108145-64-7 CAPLUS
 CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-
 octone, 7,7'-bis(1-phenylhexyl)- (CA INDEX NAME)



L4 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1533330 CAPLUS

DOCUMENT NUMBER: 150:67128

TITLE: Manufacture of electrophotographic photoconductors, electrophotographic apparatus, and process cartridges for same apparatus

INVENTOR(S): Tada, Hiromi; Tanaka, Chiaki; Shimada, Tomoyuki; Kimura, Michio; Tamoto, Nozomu; Tone, Tetsuya; Yanakawa, Yoshiteru

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokyo Koho, 66pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

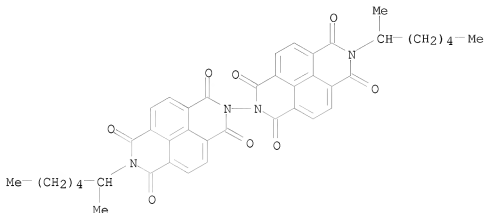
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2008310307	A	20081225	JP 2008-121864	20080508
PRIORITY APPLN. INFO.:				JP 2007-131368	A 20070517
AB	Electrophotog. photoconductors consist of, successively on elec. conductive supports, undercoat layers and photosensitive layers, wherein the undercoat layers are formed by a process including steps of (1) forming layers mainly containing binder resins on the supports, and (2) bringing the binder resin-based layers in contact with supercrit. fluids and/or subcrit. fluids containing electron-transporting substances. The photoconductors suppress residual potential elevation and sensitivity drop, and durably provide high quality images without background soiling.				
IT	866142-07-6 RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses) (electron-transport agents; manufacture of electrophotog. photoconductors with undercoat layers containing electron-transport agents)				
RN	866142-07-6 CAPLUS				
CN	[2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-				

octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



L4 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1533313 CAPLUS

DOCUMENT NUMBER: 150:67126

TITLE: Manufacture of electrophotographic photoconductors, electrophotographic apparatus, and process cartridges for same apparatus

INVENTOR(S): Tamoto, Nozomu; Tanaka, Chiaki; Shimada, Tomoyuki; Kimura, Michio; Tone, Tetsuya; Yanakawa, Yoshiteru; Tada, Hiromi

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 62pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008310291	A	20081225	JP 2007-131348	20080317
PRIORITY APPLN. INFO.:			A	20070517

AB Electrophotog. photoconductors consist of, on elec. conductive supports, single-layer photosensitive layers which contain charge-generating substances (A), hole-transporting substances (B), and electron-transporting substances (C) and are manufactured by a process including steps of (1) forming layers mainly containing curable binder resins on the supports, and curing the layers, and (2) bringing the resultant cured resin layers in contact with supercrit. fluids and/or subcrit. fluids containing A, B, and/or C. The photosensitive layers show high electrostatic and mech. durability, and durably provide high-quality images.

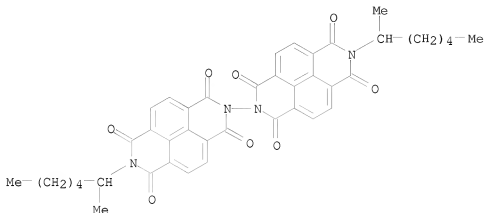
IT 866142-07-6

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (electron-transporting substances, supercrit./subcrit. fluids containing; manufacture of electrophotog. photoconductors by using supercrit. and/or subcrit. fluids)

RN 866142-07-6 CAPLUS

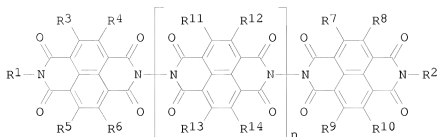
CN [2,2' (1H,1'H)-Bibenzol[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-

octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)

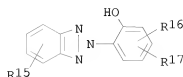


L4 ANSWER 4 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:1397426 CAPLUS
 DOCUMENT NUMBER: 149:567062
 TITLE: Electrophotographic process cartridge and apparatus
 using photoreceptor containing naphthalene
 carboxydiimide charge-transporting agent
 INVENTOR(S): Kurimoto, Eiji; Shimoyama, Keisuke
 PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 31pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2008281805	A	20081120	JP 2007-126306	20070511
PRIORITY APPLN. INFO.: GI			JP 2007-126306	20070511



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II

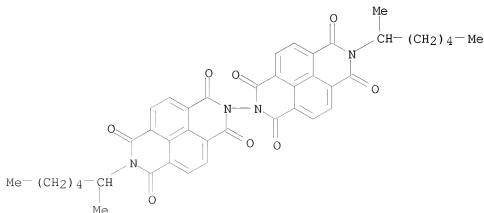
AB The photoreceptor comprises a conductive support having a photosensitive layer containing a charge-generating agent, a charge-transporting agent I [R1-2 = H, (substituted) alkyl, cycloalkyl, aralkyl; R3-14 = H, halo, cyano, nitro, OH, etc.; n = 0-100], and II [R15 = H, halo, (substituted) alkyl, aryl, etc.; R16-17 = H, (substituted) alkyl, aryl]. The apparatus has the photoreceptor, and means for charging, imagewise exposing, developing and toner image transferring. The process cartridge using the photoreceptor is also claimed. The apparatus gives clear image without defect in repeated use.

IT 866142-07-6 929037-02-5 929037-03-6
929037-04-7 929037-05-8

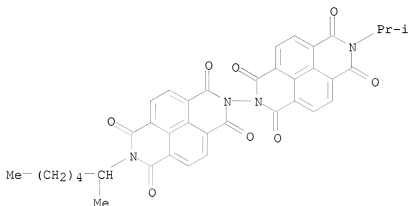
RL: TEM (Technical or engineered material use); USES (Uses)
(charge-transporting agent; electrophotog. photoreceptor containing naphthalene carboxylic acid imide charge-transporting agent and phenyltriazole compound)

RN 866142-07-6 CAPLUS

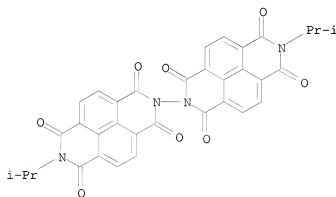
CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



RN 929037-02-5 CAPLUS

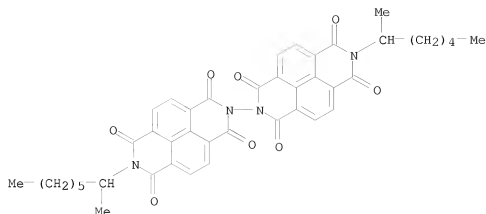
CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-
octone, 7-(1-methylethyl)-7'-(1-methylhexyl)- (CA INDEX NAME)

RN 929037-03-6 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-
octone, 7,7'-bis(1-methylethyl)- (CA INDEX NAME)

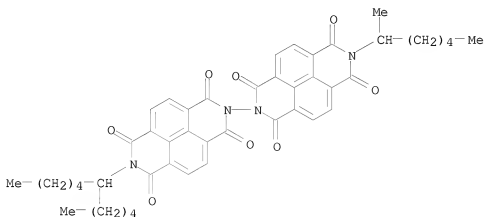
RN 929037-04-7 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-
octone, 7-(1-methylheptyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



RN 929037-05-8 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1,mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylhexyl)-7'-(1-pentylhexyl)- (CA INDEX NAME)



L4 ANSWER 5 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1158802 CAPLUS

DOCUMENT NUMBER: 149:412913

TITLE: Electrophotographic image-forming apparatus including process cartridge

INVENTOR(S): Shimoyama, Keisuke; Kurimoto, Eiji

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

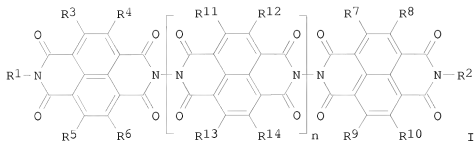
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008224785	A	20080925	JP 2007-59373	20070309
PRIORITY APPLN. INFO.:			JP 2007-59373	20070309

GI



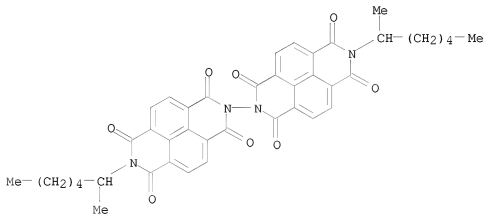
AB The title apparatus is equipped with: a photoreceptor which has a photosensitive layer on an electroconductive support; a charging means for the photoreceptor; an exposure means for the photoreceptor; a reverse-mode toner image development means; and a toner image transfer means, wherein the photosensitive layer of the photoreceptor contains titanyl phthalocyanine and charge transporting agent I (R1-2 = H, alkyl, cycloalkyl, aralkyl; R3-14 = H, halo, cyano, nitro, etc.; n = integer 0-100). The apparatus provides a photoreceptor, which is sensitive and which does not generate ghost image after repeatedly used.

IT 866142-07-6

RL: TEM (Technical or engineered material use); USES (Uses)
(charge-transporting agent for electrophotog. photoreceptor;
photosensitive layer of electrophotog. photoreceptors)

RN 866142-07-6 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-
octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



L4 ANSWER 6 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1110894 CAPLUS

DOCUMENT NUMBER: 149:435876

TITLE: Method and device for forming image using electron hole transporting material

INVENTOR(S): Kurimoto, Eiji; Shimoyama, Keisuke

PATENT ASSIGNEE(S): Ricoh Company, Ltd., Japan

SOURCE: Faming Zhuanli Shengqing Gongkai Shuomingshu, 82pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101261457	A	20080910	CN 2008-10082689	20080306
JP 2008216713	A	20080918	JP 2007-55088	20070306
US 20080305426	A1	20081211	US 2008-36779	20080225
PRIORITY APPLN. INFO.:			JP 2007-55088	A 20070306

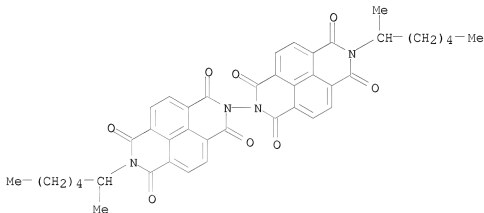
AB The title device comprises a photoconductor with at least a substrate and a photosensitive monolayer, an electrostatic-latent-image-forming unit, a developing unit, and a transfer unit. The photosensitive layer at least comprises charge-generating material, electron-transporting material, hole-transporting material, and resin as binder, and the charge-generating material contains crystalline titanil phthalocyanine and X-type non-metal phthalocyanine.

IT 866142-07-6 929037-02-5 929037-03-6
 929037-04-7 929037-05-8 929076-74-4
 934236-98-3

RL: TEM (Technical or engineered material use); USES (Uses)
 (method and device for forming image using electron hole transporting material)

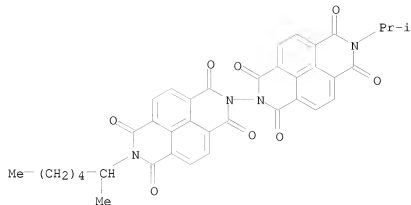
RN 866142-07-6 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



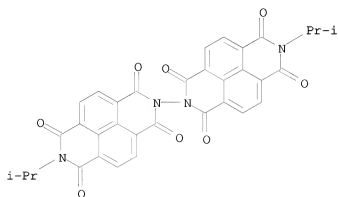
RN 929037-02-5 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylethyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



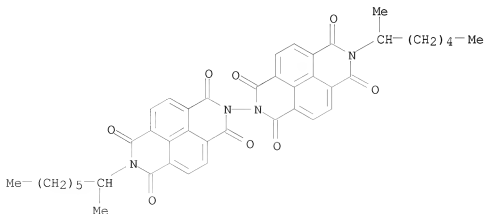
RN 929037-03-6 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-methylethyl)- (CA INDEX NAME)



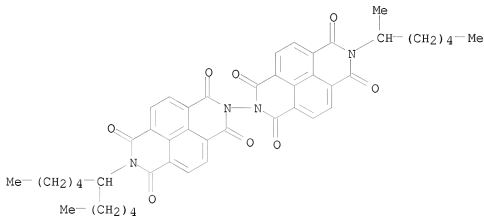
RN 929037-04-7 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylheptyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



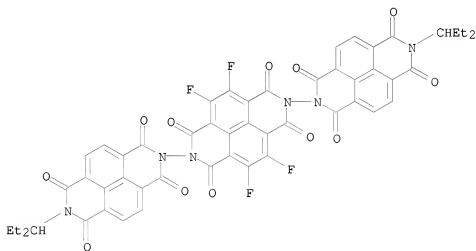
RN 929037-05-8 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-methylhexyl)-7'-(1-pentylhexyl)- (CA INDEX NAME)



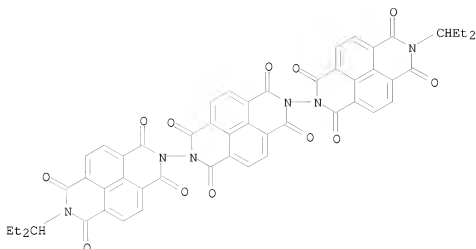
RN 929076-74-4 CAPLUS

CN [2,2' (1H,7'H):7',2'' (1''H)-Terbenzo[1mn][3,8]phenanthroline]-1,1',1'',3,3',3'',6,6',6'',8,8',8'' (7H,7''H)-dodecone, 7,7''-bis(1-ethylpropyl)-4',5',9',10'-tetrafluoro- (CA INDEX NAME)



RN 934236-98-3 CAPLUS

CN [2,2' (1H,7'H):7',2'' (1''H)-Terbenzo[1mn][3,8]phenanthroline]-1,1',1'',3,3',3'',6,6',6'',8,8',8'' (7H,7''H)-dodecone, 7,7''-bis(1-ethylpropyl)- (CA INDEX NAME)



L4 ANSWER 7 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:640709 CAPLUS

DOCUMENT NUMBER: 148:572448

TITLE: Electrophotographic apparatus employing monolayer
electrophotographic photoconductors containing
electron transporting naphthalenetracarboximides
INVENTOR(S): Kurimoto, Eiji; Shimoyama, Keisuke; Kawamura, Shinichi
PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 31pp.

CODEN: JKXXAF

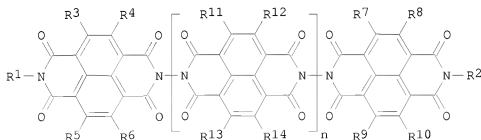
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008122763	A	20080529	JP 2006-307684	20061114
PRIORITY APPLN. INFO.:			JP 2006-307684	20061114
OTHER SOURCE(S):	MARPAT	148:572448		

GI



I

AB The apparatus employs monolayer electrophotog. photoconductors containing charge

generating substances, hole transporting substances, and naphthalenetertracarboximides I (R1, R2 = H, alkyl, cycloalkyl, aralkyl; R3-R14 = H, halo, cyano, nitro, amino, OH, alkyl, cycloalkyl, aralkyl; n = 0-100) as electron transporting substances. The apparatus involves a charging unit, an exposure unit, a development unit, a image-transfer unit applying transfer bias of polarity opposite to that of the charging unit on the developed images, a preliminary charge-removal unit applying bias of opposite polarity to that of the transfer bias, a unit removing residual charge from the photoconductors, and a controller for the preliminary charge-removal unit. Preferably, the charge generating substances contain phthalocyanines, more preferably titanylphthalocyanines having prescribed diffraction peaks. The apparatus produce high-quality images without ghost after repeated image formation.

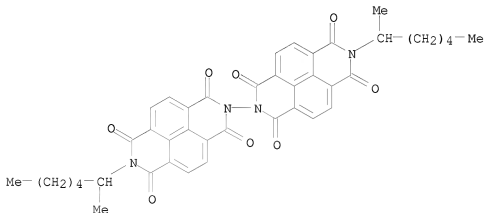
IT 866142-07-6 929037-02-5 929037-03-6
929037-04-7 929037-05-8 929076-74-4
934236-98-3

RL: TEM (Technical or engineered material use); USES (Uses)

(electrophotog. apparatus employing monolayer electrophotog. photoconductors containing electron transporting naphthalenetertracarboximides)

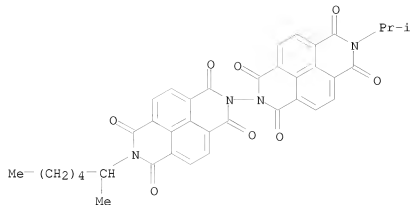
RN 866142-07-6 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



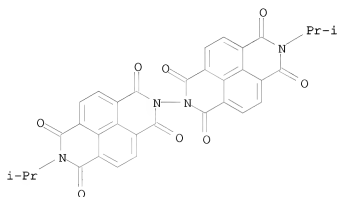
RN 929037-02-5 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-methylethyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



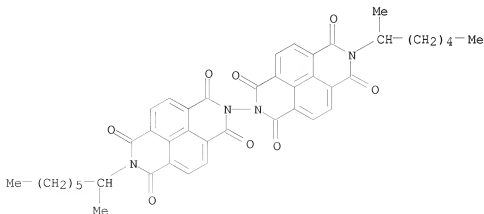
RN 929037-03-6 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-methylethyl)- (CA INDEX NAME)



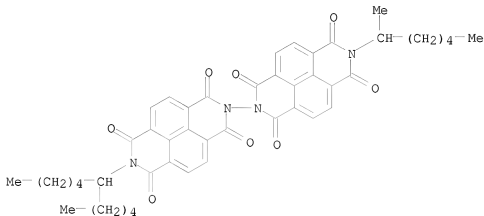
RN 929037-04-7 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylheptyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



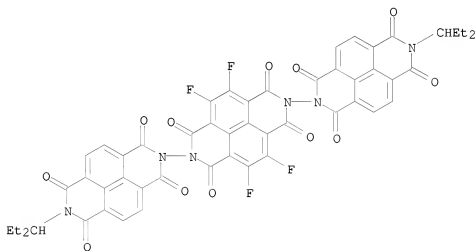
RN 929037-05-8 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-methylhexyl)-7'-(1-pentylhexyl)- (CA INDEX NAME)



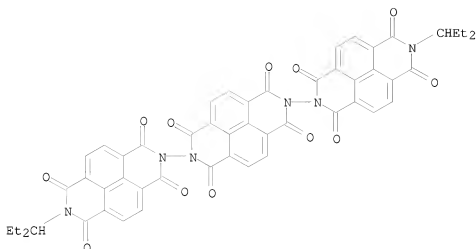
RN 929076-74-4 CAPLUS

CN [2,2' (1H,7'H):7',2'' (1''H)-Terbenzo[1mn][3,8]phenanthroline]-1,1',1'',3,3',3'',6,6',6'',8,8',8'' (7H,7''H)-dodecone, 7,7''-bis(1-ethylpropyl)-4',5',9',10'-tetrafluoro- (CA INDEX NAME)



RN 934236-98-3 CAPLUS

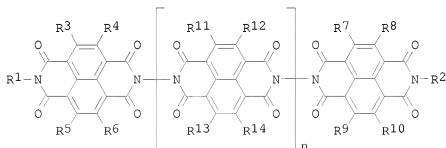
CN [2,2' (1H,7'H):7',2'' (1''H)-Terbenzo[1mn][3,8]phenanthroline]-1,1',1'',3,3',3'',6,6',6'',8,8',8'' (7H,7''H)-dodecone, 7,7''-bis(1-ethylpropyl)- (CA INDEX NAME)



L4 ANSWER 8 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:587543 CAPLUS
 DOCUMENT NUMBER: 148:572408
 TITLE: Electrophotographic photoreceptor, image forming apparatus and process cartridge
 INVENTOR(S): Shimoyama, Keisuke; Kurimoto, Elji; Kawamura, Shiniohi
 PATENT ASSIGNEE(S): Japan
 SOURCE: U.S. Pat. Appl. Publ., 25pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20080113286	A1	20080515	US 2007-929083	20071030
JP 2008122740	A	20080529	JP 2006-307475	20061114
PRIORITY APPLN. INFO.:			JP 2006-307475	A 20061114
OTHER SOURCE(S):	MARPAT	148:572408		

GI



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AB The invention relates to an electrophotog. photoreceptor comprising: an

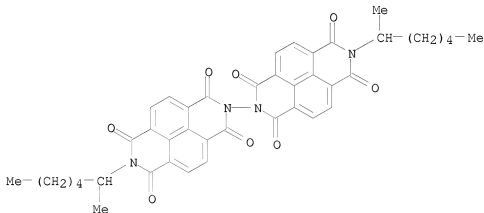
electroconductive substrate; and a photosensitive layer located overlying the electroconductive substrate, wherein the photosensitive layer is a single-layered layer comprising a charge generation material and an electron transport material having formula I, wherein R1 and R2 independently represent a hydrogen atom, and a group selected from the group consisting of substituted or unsubstituted alkyl groups, substituted or unsubstituted cycloalkyl groups and substituted or unsubstituted aralkyl groups; R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13 and R14 independently represent a hydrogen atom, a halogen atom, and a group selected from the group consisting of cyano groups, nitro groups, amino groups, a hydroxy groups, substituted or unsubstituted alkyl groups, substituted or unsubstituted cycloalkyl groups and substituted or unsubstituted aralkyl groups; and n is a repeat unit and represents 0 and an integer of from 1 to 100 and wherein the charge generation materials is a titanylphthalocyanine having a specific CuK α 1.542 Å X-ray diffraction spectrum. The objective of the invention is to provide a single-layered electrophotog. photoreceptor having high sensitivity, being stably charged and not producing abnormal images such as residual images even after repeatedly used.

IT 866142-07-6 929037-02-5 934236-98-3
949534-66-1 1025411-77-1 1025411-79-3
1025411-82-8 1025411-84-0

RL: TEM (Technical or engineered material use); USES (Uses)
(charge-transporting material in electrophotog. photoreceptor)

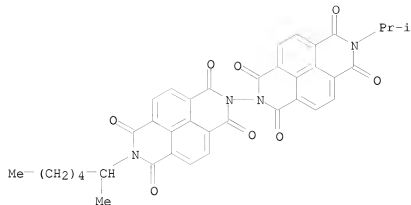
RN 866142-07-6 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



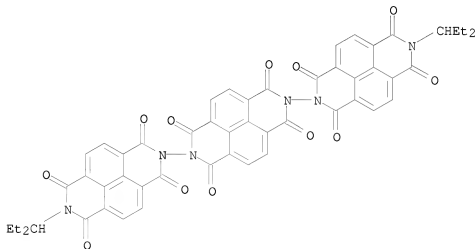
RN 929037-02-5 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylethyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



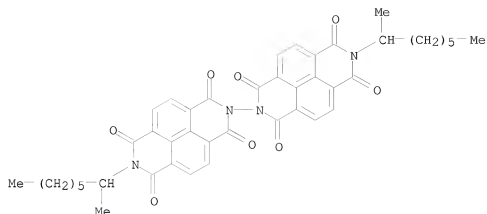
RN 934236-98-3 CAPLUS

CN [2,2' (1H, 7'H):7'',2'' (1'H)-Terbenzo[lmn][3,8]phenanthroline]-
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7,7''-bis(1-ethylpropyl)- (CA INDEX NAME)



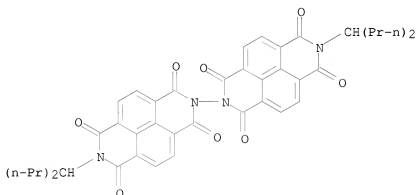
RN 949534-66-1 CAPLUS

CN [2,2' (1H, 1'H)-Bibenzo[lmn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H, 7'H)-
octone, 7,7'-bis(1-methylheptyl)- (CA INDEX NAME)



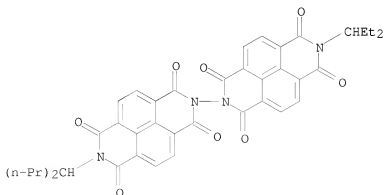
RN 1025411-77-1 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-propylbutyl)- (CA INDEX NAME)



RN 1025411-79-3 CAPLUS

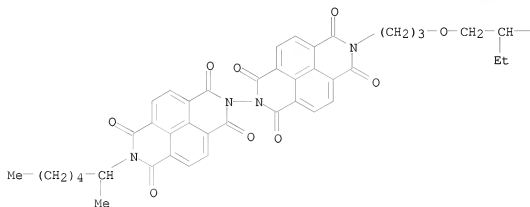
CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-ethylpropyl)-7'-(1-propylbutyl)- (CA INDEX NAME)



RN 1025411-82-8 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-
octone, 7-[3-[(2-ethylhexyl)oxy]propyl]-7'-(1-methylhexyl)- (CA INDEX
NAME)

PAGE 1-A

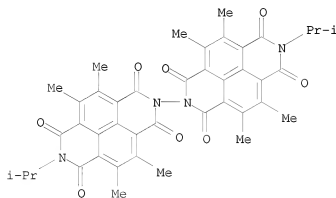


PAGE 1-B

— Bu-n

RN 1025411-84-0 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-
octone, 4,4',5,5',9,9',10,10'-octamethyl-7,7'-bis(1-methylethyl)- (CA
INDEX NAME)



L4 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2009 ACS ON STN

ACCESSION NUMBER: 2008:349337 CAPLUS

DOCUMENT NUMBER: 148:366521

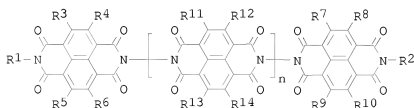
TITLE: Electrophotographic apparatuses forming defect-free
images for long term

INVENTOR(S): Kurimoto, Eiji; Shimoyama, Keisuke; Kawamura, Shinichi

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 31pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008065115	A	20080321	JP 2006-243852	20060908

PRIORITY APPLN. INFO.: JP 2006-243852 20060908
 GI



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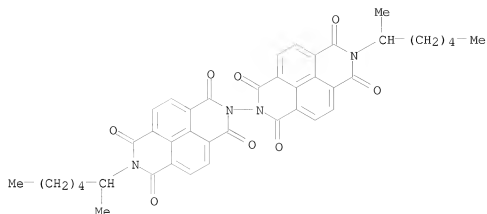
AB The title apps. have photoreceptor drums containing conductive substrates forming (i) photosensitive layers wherein charge-generating agents and charge-transporting agents I [R1, R2 = H, (cyclo)alkyl, aralkyl; R3-R14 = H, halo, cyano, nitro, amino, OH, (cyclo)alkyl, aralkyl; n = 0-100] are included and (ii) polyethylene wax-applied outermost layers.

IT 866142-07-6 929037-02-5 929037-03-6
 929037-05-8 929076-74-4 934236-98-3
 949534-66-1

RL: TEM (Technical or engineered material use); USES (Uses)
 (charge-transporting agents; electrophotog. apps. containing prescribed charge-transporting agents and polyethylene wax-applied outermost layers and showing good durability on repetitive uses)

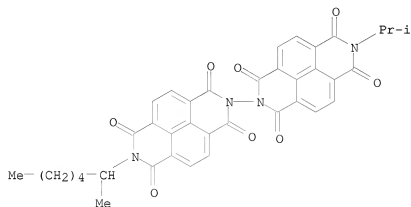
RN 866142-07-6 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



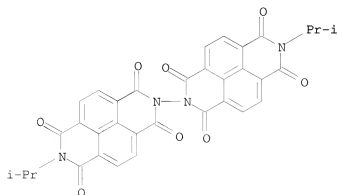
RN 929037-02-5 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylethyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



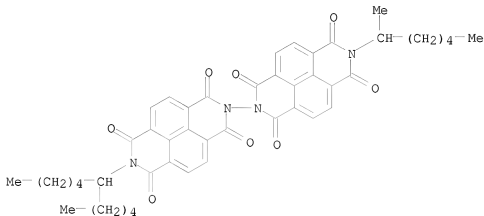
RN 929037-03-6 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-methylethyl)- (CA INDEX NAME)



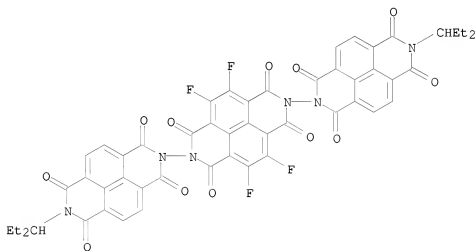
RN 929037-05-8 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-methylhexyl)-7'-(1-pentylhexyl)- (CA INDEX NAME)



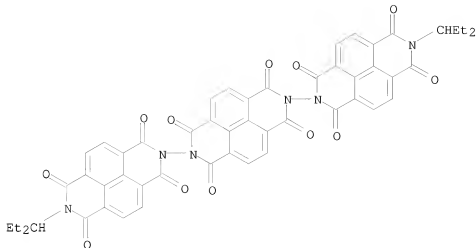
RN 929076-74-4 CAPLUS

CN [2,2' (1H,7'H):7',2'' (1''H)-Terbenzo[1mn][3,8]phenanthroline]-1,1',1'',3,3',3'',6,6',6'',8,8',8'' (7H,7''H)-dodecone, 7,7''-bis(1-ethylpropyl)-4',5',9',10'-tetrafluoro- (CA INDEX NAME)

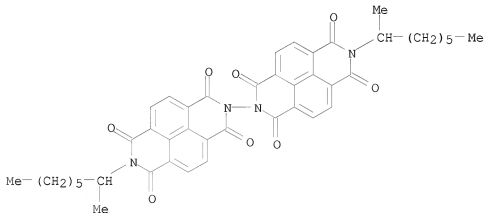


RN 934236-98-3 CAPLUS

CN [2,2' (1H,7'H):7',2'' (1''H)-Terbenzo[1mn][3,8]phenanthroline]-1,1',1'',3,3',3'',6,6',6'',8,8',8'' (7H,7''H)-dodecone, 7,7''-bis(1-ethylpropyl)- (CA INDEX NAME)



RN 949534-66-1 CAPLUS
 CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-
 octone, 7,7'-bis(1-methylheptyl)- (CA INDEX NAME)



L4 ANSWER 10 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:322135 CAPLUS

DOCUMENT NUMBER: 148:366493

TITLE: Electrophotographic photoconductor, method for
 producing the same, image forming process, image
 forming apparatus and process cartridge
 INVENTOR(S): Toshine, Tetsuya; Tanaka, Chiaki; Kimura, Michio;
 Shimada, Tomoyuki; Tamoto, Nozomu; Yanagawa, Yoshiki;
 Tada, Hiromi

PATENT ASSIGNEE(S): Japan

SOURCE: U.S. Pat. Appl. Publ., 71pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20080063962	A1	20080313	US 2007-850394	20070905
JP 2008139829	A	20080619	JP 2007-204763	20070806
PRIORITY APPLN. INFO.:			JP 2006-243289	A 20060907
			JP 2006-299370	A 20061102
			JP 2007-204763	A 20070806

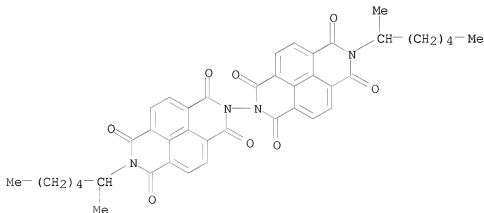
AB The present invention provides an electrophotog. photoconductor capable of reducing latent electrostatic image stability defects caused by adhesion/adsorption of an elec. discharge product formed by a charger in an image forming process, degradation of charge transportability and cleaning defects caused when removing a residual toner. The electrophotog. photoconductor has a conductive substrate, and a photosensitive layer which contains at least a binder, a charge generating material and a charge transporting material and is formed on the substrate, wherein the photosensitive layer contains an injection material composed of at least any one of one wax selected from paraffin waxes, Fischer-Tropsch waxes, polyolefin waxes and a polyorganosiloxane compound in an area from the surface of the photosensitive layer to 50% of the thickness thereof in the thickness direction of the electrophotog. photoconductor, and the content of the injection material is 3% by mass or more to the content of the binder.

IT 866142-07-6

RL: TEM (Technical or engineered material use); USES (Uses)
(electrophotog. photoconductor, method for producing the same, image forming process, image forming apparatus and process cartridge)

RN 866142-07-6 CAPLUS

CN [2,2'-(1H,1'H)-Bibenz[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



L4 ANSWER 11 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:1309439 CAPLUS

DOCUMENT NUMBER: 147:551154

TITLE: Image forming apparatus

INVENTOR(S): Kurimoto, Eiji; Shimoyama, Keisuke; Kawamura, Shinich
JAPAN

PATENT ASSIGNEE(S):

SOURCE: U.S. Pat. Appl. Publ., 21pp.

CODEN: USXXCO

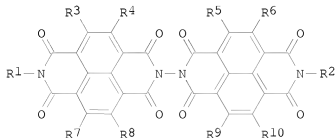
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070264047	A1	20071115	US 2007-747239	20070511
JP 2007304365	A	20071122	JP 2006-133250	20060512
PRIORITY APPLN. INFO.:			JP 2006-133250	A 20060512
OTHER SOURCE(S):	MARPAT 147:551154			
GI				



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AB An image forming apparatus having an image bearing member having a substrate and a photosensitive layer having a charge generating layer and a charge transport layer, a charging device for uniformly charging the surface of the image bearing member, an irradiating device having a light source for irradiating the image bearing member to form a latent electrostatic image thereon, a developing device for developing the latent electrostatic image, a transfer device for transferring the developed image to a recording medium and a cleaning device for cleaning the surface of the image bearing member:. Wherein the charge transport layer contains a charge transport material represented by the following chemical formulas (I) light source emits light having a wavelength not less than 600 nm and the image bearing member is not irradiated with light having a wavelength less than 600 nm, wherein R1 and R2 independently denote a hydrogen atom, a substituted or non-substituted alkyl group, a substituted or non-substituted cycloalkyl group, a substituted or non-substituted aralkyl group, R3, R4, R5, R6, R7, R8, R9 and R10 independently denote a hydrogen atom, a halogen atom, cyano group, nitro group, amino group, hydroxyl group, a substituted or non-substituted alkyl group, a substituted or non-substituted cycloalkyl group, a substituted or non-subst.

IT 866142-07-6P 929037-02-5P 929037-03-6P

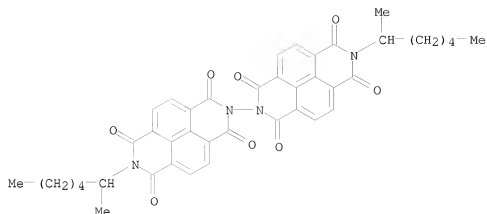
929037-04-7P 929037-05-8P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(image forming apparatus)

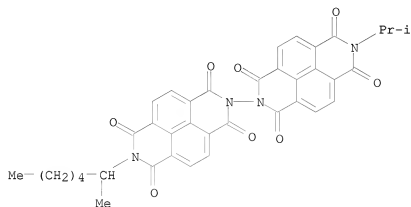
RN 866142-07-6 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1m][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



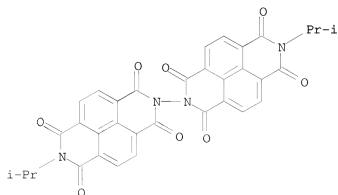
RN 929037-02-5 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylethyl)-7'-(1-methylhexyl)- (CA INDEX NAME)

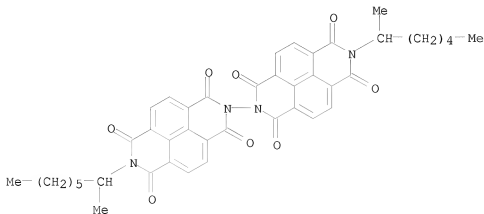


RN 929037-03-6 CAPLUS

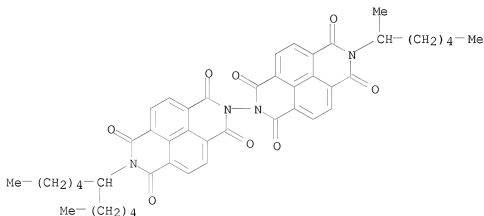
CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-methylethyl)- (CA INDEX NAME)



RN 929037-04-7 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-
octone, 7-(1-methylheptyl)-7'-(1-methylhexyl)- (CA INDEX NAME)

RN 929037-05-8 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-
octone, 7-(1-methylhexyl)-7'-(1-pentylhexyl)- (CA INDEX NAME)

L4 ANSWER 12 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:1203229 CAPLUS

DOCUMENT NUMBER: 147:477498

TITLE: Electrophotographic photoconductor, image forming
apparatus, and process cartridge

INVENTOR(S): Shimoyama, Keisuke; Kurimoto, Eiji; Kawamura, Shinichi

PATENT ASSIGNEE(S): Ricoh Company, Ltd., Japan

SOURCE: Eur. Pat. Appl., 49pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

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EP 1847882	A1	20071024	EP 2007-106588
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU			20070420
JP 2007286536	A	20071101	JP 2006-116457
JP 2008052014	A	20080306	JP 2006-227576
US 20070248901	A1	20071025	US 2007-736919
CN 101059663	A	20071024	CN 2007-10100837
PRIORITY APPLN. INFO.:			JP 2006-116457
			JP 2006-227576

OTHER SOURCE(S): MARPAT 147:477498

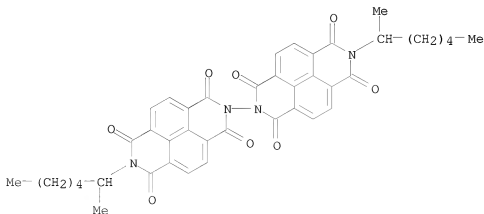
AB An electrophotog. photoconductor contains a photosensitive layer and a conductive substrate, wherein the photosensitive layer is disposed on the conductive substrate, and the photosensitive layer is a single layer containing a charge generating material, an electron transporting material expressed by the General Formula (1) and a hole transporting material expressed by the General Formula (2): wherein R1 and R2 independently represent any one of a hydrogen atom, substituted or unsubstituted alkyl group, substituted or unsubstituted cycloalkyl group and substituted or unsubstituted aralkyl group, and R3, R4, R5, R6, R7, R8, R9 and R10 independently represent any one of a hydrogen atom, halogen atom, cyano group, nitro group, amino group, hydroxyl group, substituted or unsubstituted alkyl group, substituted or unsubstituted cycloalkyl group and substituted or unsubstituted aralkyl group; and wherein R11, R12, R13, R14, R17, R18, R19 and R20 each represents a hydrogen atom, halogen atom, alkoxy group, alkyl group which may be substituted or aryl group which may be substituted, R15 and R16 each represents a hydrogen atom, halogen atom, alkyl group, and alkoxy group.

IT 866142-07-6

RL: TEM (Technical or engineered material use); USES (Uses)
(Electrophotog. photoconductor, image forming apparatus, and process cartridge)

RN 866142-07-6 CAPLUS

CN [2,2'-(1H,1'H)-Bibenz[1,2,3,4,5,6,7,8]-phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)

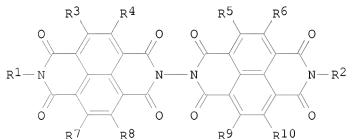


REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:1027801 CAPLUS

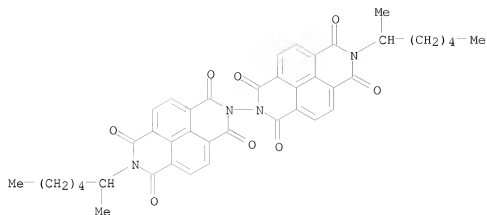
DOCUMENT NUMBER: 147:374473
 TITLE: Electrophotographic photoreceptor in process cartridge
 of electrophotographic image-forming apparatus
 INVENTOR(S): Shimoyama, Keisuke; Kurimoto, Eiji
 PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 29pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007233116	A	20070913	JP 2006-55784	20060302
PRIORITY APPLN. INFO.: OTHER SOURCE(S): GI	MARPAT 147:374473		JP 2006-55784	20060302



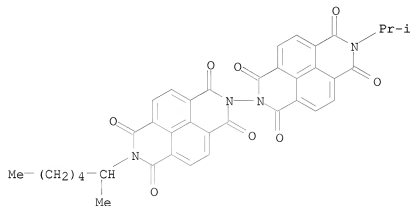
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- AB The title photoreceptor has a photosensitive monolayer containing a charge-generating material and a charge-transporting material on an electroconductive support, wherein the charge-generating material is titanyl phthalocyanine of 27.2° maximum diffraction peak and 26.3° peak of 1-99% peak intensity based on the maximum peak by CuKα x-ray(1.542 Å wavelength) diffraction anal. with Bragg's angle 20±0.2° and wherein the charge-transporting material has general structure I (R1-2 = H, alkyl, cycloalkyl, etc.; R3-10 = H, halo, cyano, nitro, etc.). The photoreceptor shows high sensitivity and provides high quality images for long time.
- IT 866142-07-6P 929037-02-5P 929037-04-7P
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (charge-transporting compound; electrophotog. photoreceptor in process cartridge of electrophotog. image-forming apparatus)
- RN 866142-07-6 CAPLUS
- CN [2,2'(1H,1'H)-Bibenzo[1,lm][3,8]phenanthroline]-1,1',3,3',6,6',8,8'(7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



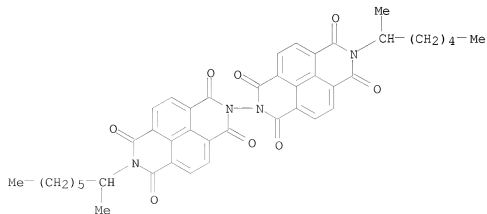
RN 929037-02-5 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylethyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



RN 929037-04-7 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylheptyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



L4 ANSWER 14 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:998753 CAPLUS

DOCUMENT NUMBER: 147:353185

TITLE: Electrophotographic photoconductor and its manufacture

INVENTOR(S): Yanagawa, Yoshiki; Kawasaki, Yoshiaki; Suzuki, Tetsuro

PATENT ASSIGNEE(S): Ricoh Company, Ltd., Japan

SOURCE: PCT Int. Appl., 154 pp.

CODEN: PIXXD2

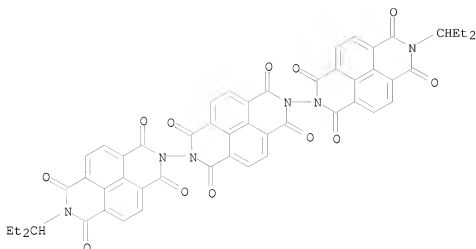
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

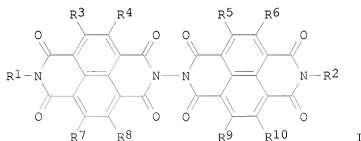
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007100132	A1	20070907	WO 2007-JP54146	20070227
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
AU 2007221629	A1	20070907	AU 2007-221629	20070227
CA 2644812	A1	20070907	CA 2007-2644812	20070227
EP 1989595	A1	20081112	EP 2007-737756	20070227
R:	DE, ES, FR, GB, IT, NL			
JP 2007264625	A	20071011	JP 2007-51056	20070301
KR 2008091833	A	20081014	KR 2008-721204	20080829
US 20090035672	A1	20090205	US 2008-281230	20080829
MX 2008011163	A	20080909	MX 2008-11163	20080901
CN 101395538	A	20090325	CN 2007-80007381	20080901
IN 2008KN03612	A	20090220	IN 2008-KN3612	20080903
PRIORITY APPLN. INFO.:			JP 2006-54655	A 20060301
			WO 2007-JP54146	W 20070227
AB	Title electrophotog. photoconductor comprises a support and a crosslinked layer formed over the support, wherein the crosslinked layer comprises at least light curable radically polymerizable compound, the difference of maximum value of the post-exposure elec. potential and min. value of the post-exposure elec. potential when writing is conducted under the condition that image static power is 0.53 mW, exposure energy is 4.0 erg/cm ² for the electrophotog. photoconductor is within 30 V.			
IT	934236-98-3			
	RL: MOA (Modifier or additive use); USES (Uses)			
	(electrophotog. photoconductor and its manufacture)			
RN	934236-98-3 CAPLUS			
CN	[2,2'-(1H,7'H):7'',2''(1''H)-Terbenzo[lmn][3,8]phenanthroline]-1,1',1'',3,3',3'',6,6',6'',8,8',8''(7H,7''H)-dodecone, 7,7''-bis(1-ethylpropyl)- (CA INDEX NAME)			



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:971009 CAPLUS
 DOCUMENT NUMBER: 147:311232
 TITLE: Electrophotographic apparatuses having photoreceptor layers with less film shrinkage or layer peeling
 INVENTOR(S): Kurimoto, Eiji; Shimoyama, Keisuke
 PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 41pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007219126	A	20070830	JP 2006-39216	20060216
PRIORITY APPLN. INFO.: OTHER SOURCE(S): GI	MARPAT 147:311232		JP 2006-39216	20060216



AB The apps. have photoreceptor drums forming photosensitive layers containing charge-generating substances (e.g., titanil phthalocyanine),

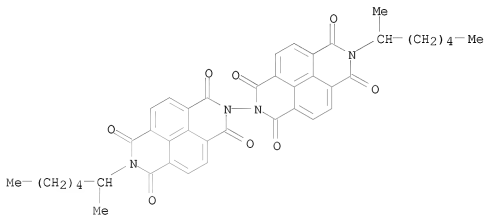
charge-transporting substances I [R1, R2 = H, (cyclo)alkyl, aralkyl; R3-R10 = H, halo, CN, NO2, amino, etc.], and compds.
 C6H6-1-m-nR11(R12Ar1)m(R13Ar2)n [R11 = C1-6 alkyl; R12, R13 = (m)ethyl, (m)ethylene; Ar1, Ar2 = aryl; l, m, n = 1-6] and satisfying Tg $\leq 130^\circ$. The photosensitive layers may contain polycarbonate resins.

IT 866142-07-6P 929037-02-5P 929037-03-6P
 929037-04-7P 946827-79-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (charge-transporting substance; electrophotog. apps. having photoreceptor layers with less shrinkage or layer peeling)

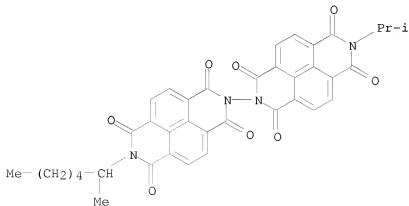
RN 866142-07-6 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



RN 929037-02-5 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-methylethyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



RN 929037-03-6 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7,7'-bis(1-methylethyl)- (CA INDEX NAME)

L4 ANSWER 16 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:460356 CAPLUS

DOCUMENT NUMBER: 146:431291

TITLE: Electrophotographic apparatus and process cartridge with photoreceptor containing naphthalene carboxylic acid imide charge-transporting agent
 Inventor(s): Toda, Naohiro; Kurimoto, Eiji; Shimoyama, Keisuke; Kawamura, Shinichi

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 38pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

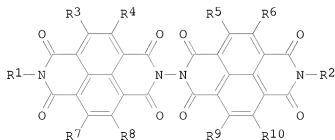
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

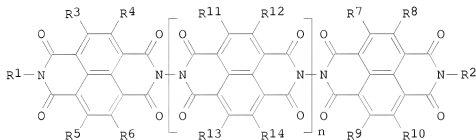
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007108652	A	20070426	JP 2006-131614	20060510
PRIORITY APPLN. INFO.: OTHER SOURCE(S):		MARPAT 146:431291	JP 2005-270998	A 20050916

GI



I

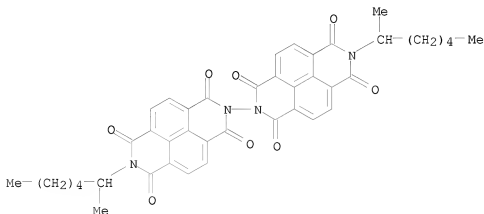


II

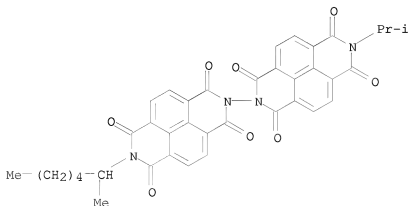
AB The apparatus comprises corona-charging devices, imagewise exposing device, a developing and image-transporting devices, and a photoreceptor with a photosensitive layer containing a charge-generating agent and a charge-transporting agent I (R1-2 = H, alkyl, cycloalkyl; R3-10 = H, halo, CN, nitro, amino, OH, alkyl, cycloalkyl, aralkyl). Alternatively, the photoreceptor contains a charge-transporting agent II (R1-2 = H, alkyl,

cycloalkyl; R3-14 = H, halo, CN, nitro, amino, OH, alkyl, cycloalkyl, aralkyl; n = 1-100). Detachable process cartridge using the photoreceptor is also claimed. As the deterioration by acidic gas is prevented, the photoreceptor gives clear images for a long period of time.

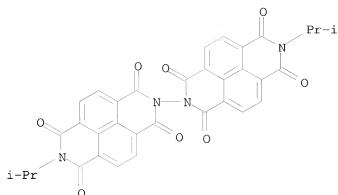
- IT 866142-07-6P 929037-02-5P 929037-03-6P
929037-04-7P 929037-05-8P 934236-98-3P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(electrophotog. photoreceptor containing naphthalene carboxylic acid imide charge-transporting agent)
- RN 866142-07-6 CAPLUS
- CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



- RN 929037-02-5 CAPLUS
- CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-methylethyl)-7'-(1-methylhexyl)- (CA INDEX NAME)

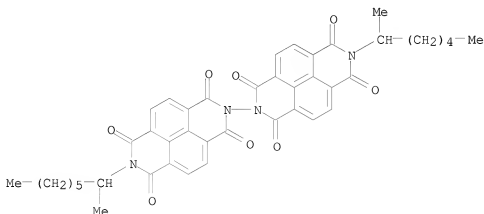


- RN 929037-03-6 CAPLUS
- CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7,7'-bis(1-methylethyl)- (CA INDEX NAME)



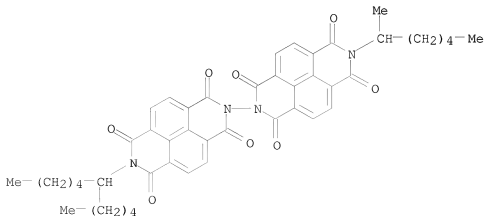
RN 929037-04-7 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylheptyl)-7'-(1-methylhexyl)- (CA INDEX NAME)

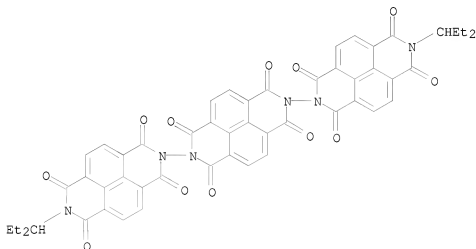


RN 929037-05-8 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylhexyl)-7'-(1-pentylhexyl)- (CA INDEX NAME)



RN 934236-98-3 CAPLUS
 CN [2,2' (1H,7'H):7',2'' (1''H)-Terbenzo[lmn][3,8]phenanthroline]-
 1,1',1'',3,3',3'',6,6',6'',8,8',8'' (7H,7''H)-dodecane,
 7,7''-bis(1-ethylpropyl)- (CA INDEX NAME)



L4 ANSWER 17 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:460354 CAPLUS
 DOCUMENT NUMBER: 146:451541
 TITLE: Electrophotographic apparatus with toner recovering means and process cartridge
 INVENTOR(S): Kurimoto, Eiji; Shimoyama, Keisuke; Kawamura, Shinichi
 PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 31pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

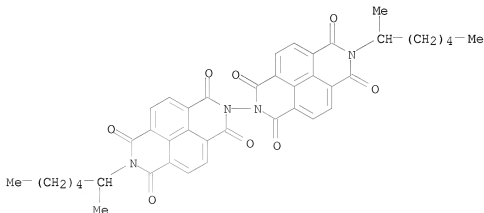
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007108644	A	20070426	JP 2006-109428	20060412
PRIORITY APPLN. INFO.:			JP 2005-267782	A 20050915
OTHER SOURCE(S):	MARPAT	146:451541		
GI				

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

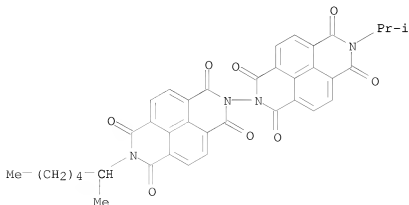
AB The apparatus comprises a contact-charging device, imagewise exposing device, a developing and image-transporting devices, a photoreceptor with a photosensitive layer containing a charge-transporting agent I (R1-2 = H, alkyl, cycloalkyl; R3-10 = H, halo, CN, nitro, amino, OH, alkyl, cycloalkyl, aralkyl), and reverse-charged toner recovering means with the bias having the same polarity as the toner at downstream side of the transporting means, in which the recovered toner is returned to the

photoreceptor at time other than image formation. Alternatively, the photoreceptor contains the charge-transporting agent II (R1-2 = H, alkyl, cycloalkyl; R3-14 = H, halo, CN, nitro, amino, OH, alkyl, cycloalkyl, aralkyl; n = 1-100). The process cartridge comprises the photoreceptor and the toner recovering means. The image forming apparatus comprises the process cartridge and changeable toner bottle. The compact and cost-effective electrophotog. apparatus shows good durability and gives clear images with high accuracy.

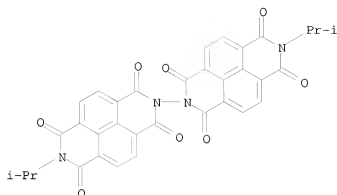
- IT 866142-07-6P 929037-02-5P 929037-03-6P
 929037-04-7P 929037-05-8P 934236-98-3P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (charge-transporting agent; electrophotog. photoreceptor containing naphthalene carboxylic acid imide charge-transporting agent)
 RN 866142-07-6 CAPLUS
 CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



- RN 929037-02-5 CAPLUS
 CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-methylethyl)-7'-(1-methylhexyl)- (CA INDEX NAME)

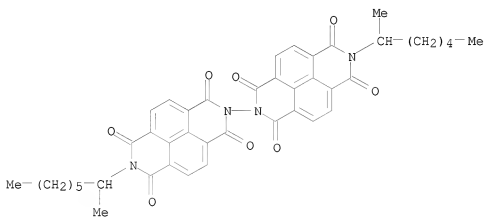


- RN 929037-03-6 CAPLUS
 CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7,7'-bis(1-methylethyl)- (CA INDEX NAME)



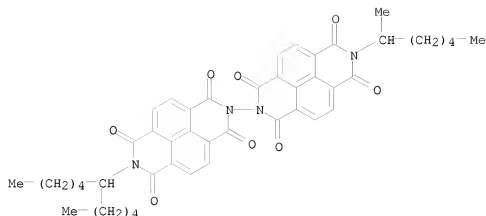
RN 929037-04-7 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1,2,3-c:4',5'-b']phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylheptyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



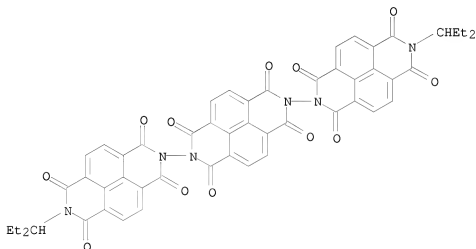
RN 929037-05-8 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1,2,3-c:4',5'-b']phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylhexyl)-7'-(1-pentylhexyl)- (CA INDEX NAME)



RN 934236-98-3 CAPLUS

CN [2,2' (1H,7'H):7',2'' (1''H)-Terbenzo[lmn][3,8]phenanthroline]-
 1,1',1'',3,3',3'',6,6',6'',8,8',8'' (7H,7''H)-dodecone,
 7,7''-bis(1-ethylpropyl)- (CA INDEX NAME)

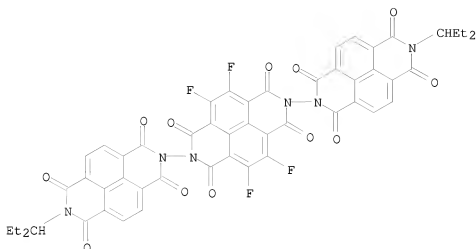


IT 929076-74-4

RL: TEM (Technical or engineered material use); USES (Uses)
 (charge-transporting agent; electrophotog. photoreceptor containing
 naphthalene carboxylic acid imide charge-transporting agent)

RN 929076-74-4 CAPLUS

CN [2,2' (1H,7'H):7',2'' (1''H)-Terbenzo[lmn][3,8]phenanthroline]-
 1,1',1'',3,3',3'',6,6',6'',8,8',8'' (7H,7''H)-dodecone,
 7,7''-bis(1-ethylpropyl)-4',5',9',10'-tetrafluoro- (CA INDEX NAME)



L4 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:460351 CAPLUS

DOCUMENT NUMBER: 146:451539

TITLE: Compact-type electrophotographic apparatus using photoreceptor containing naphthalene carboxylic acid imide charge-transporting agent

INVENTOR(S): Shimoyama, Keisuke; Kurimoto, Eiji; Kawamura, Shinichi

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 31pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

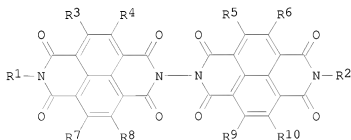
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007108632	A	20070426	JP 2006-30625	20060208
PRIORITY APPLN. INFO.:			JP 2005-266175	A 20050914
OTHER SOURCE(S):	MARPAT	146:451539		

GI



AB The apparatus comprises a contact-charging device, imagewise exposing device, a

developing and image-transporting devices, and a photoreceptor with a photosensitive layer containing a charge-generating agent and a charge-transporting agent I (R1-2 = H, alkyl, cycloalkyl; R3-10 = H, halo, CN, nitro, amino, OH, alkyl, cycloalkyl, aralkyl). A process cartridge using the photoreceptor is also claimed. The compact-type electrophotog. apparatus gives clear images for a long range of time.

IT 866142-07-6P 929037-02-5P 929037-04-7P

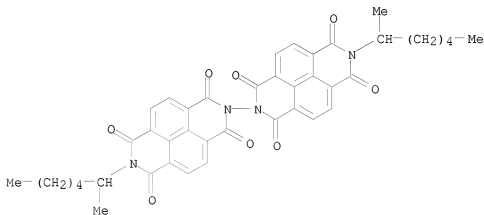
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(electrophotog. apparatus using photoreceptor containing naphthalene carboxylic

acid imide charge-transporting agent)

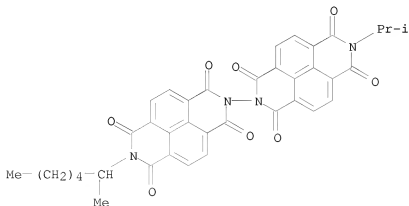
RN 866142-07-6 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



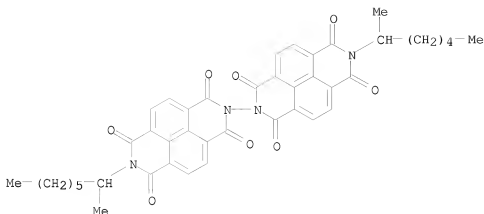
RN 929037-02-5 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-methylethyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



RN 929037-04-7 CAPLUS

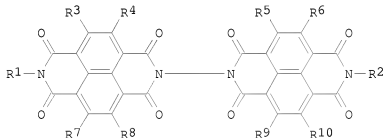
CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-methylheptyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



L4 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:408758 CAPLUS
 DOCUMENT NUMBER: 146:431249
 TITLE: Electrophotographic image-forming apparatus
 INVENTOR(S): Kurimoto, Eiji; Shimoyama, Keisuke; Kawamura, Shinichi
 PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 37pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007094360	A	20070412	JP 2006-72038	20060316
PRIORITY APPLN. INFO.:			JP 2005-254616	A 20050902
OTHER SOURCE(S):	MARPAT 146:431249			

GI



I

AB The title apparatus is equipped with: a photoreceptor having a photosensitive layer and a protective layer on an electroconductive support; a photoreceptor-charging device; a photoreceptor-exposure device to form a latent image; a toner image-development device; and a toner image transfer device, wherein charge-transporting compound I (R1-2 = H, alkyl, cycloalkyl, aralkyl; R3-10 = H, halo, cyano, nitro, etc.) is added in the

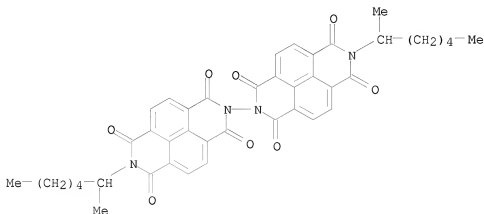
photosensitive layer and a protective layer of the photoreceptor. The apparatus shows little increase of residual voltage on a photoreceptor after long service.

IT 866142-07-6P 929037-02-5P 929037-03-6P
929037-04-7P 929037-05-8P 929076-74-4P
934236-98-3P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(charge-transporting compound in photosensitive layer and protective layer of photoreceptor)

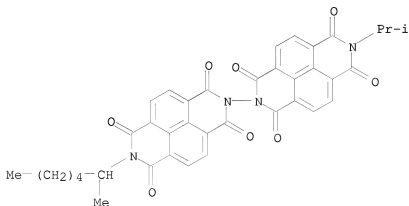
RN 866142-07-6 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



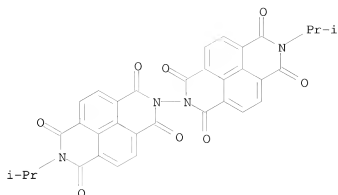
RN 929037-02-5 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-methylethyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



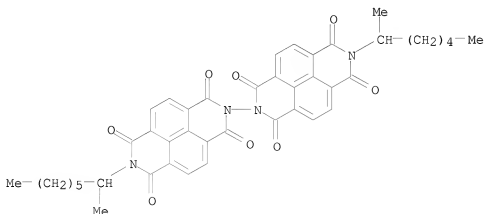
RN 929037-03-6 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7,7'-bis(1-methylethyl)- (CA INDEX NAME)



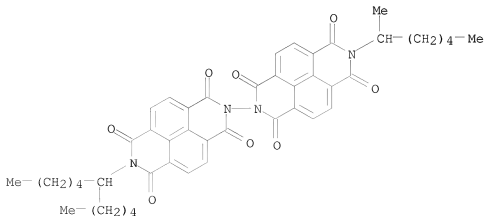
RN 929037-04-7 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylheptyl)-7'-(1-methylhexyl)- (CA INDEX NAME)

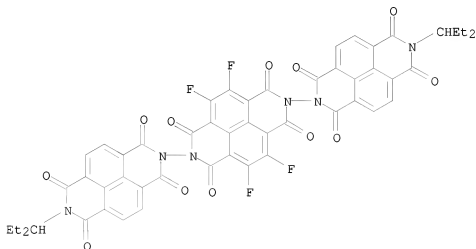


RN 929037-05-8 CAPLUS

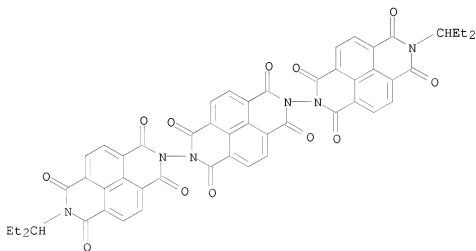
CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylhexyl)-7'-(1-pentylhexyl)- (CA INDEX NAME)



RN 929076-74-4 CAPLUS
 CN [2,2' (1H,7'H):7',2'' (1''H)-Terbenzo[lmn][3,8]phenanthroline]-
 1,1',1'',3,3',3'',6,6',6'',8,8',8''(7H,7''H)-dodecane,
 7,7''-bis(1-ethylpropyl)-4',5',9',10'-tetrafluoro- (CA INDEX NAME)



RN 934236-98-3 CAPLUS
 CN [2,2' (1H,7'H):7',2'' (1''H)-Terbenzo[lmn][3,8]phenanthroline]-
 1,1',1'',3,3',3'',6,6',6'',8,8',8''(7H,7''H)-dodecane,
 7,7''-bis(1-ethylpropyl)- (CA INDEX NAME)

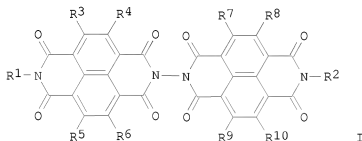


L4 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:287116 CAPLUS
 DOCUMENT NUMBER: 146:347362
 TITLE: Electrophotographic photoconductor, image forming
 apparatus, image forming method, and process cartridge
 Shimoyama, Keisuke; Kurimoto, Eiji; Orito, Takeshi;
 Niimi, Tatsuya; Kawamura, Shinichi; Yanagawa, Yoshiki;
 Sasaki, Michitaka

PATENT ASSIGNEE(S): Japan
 SOURCE: U.S. Pat. Appl. Publ., 121 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070059619	A1	20070315	US 2006-518944	20060912
JP 2007079307	A	20070329	JP 2005-269166	20050915
JP 2007079498	A	20070329	JP 2005-270999	20050916
JP 2007079505	A	20070329	JP 2005-271015	20050916
JP 2007108637	A	20070426	JP 2006-40315	20060217
JP 2007108651	A	20070426	JP 2006-129486	20060508
JP 2007108665	A	20070426	JP 2006-167116	20060616
JP 2007108670	A	20070426	JP 2006-177174	20060627
JP 2008033207	A	20080214	JP 2006-240753	20060905
JP 2007108719	A	20070426	JP 2006-244842	20060908
CN 101013276	A	20070808	CN 2006-10064471	20060913
PRIORITY APPLN. INFO.:			JP 2005-264724	A 20050913
			JP 2005-267862	A 20050915
			JP 2005-269160	A 20050915
			JP 2005-269161	A 20050915
			JP 2005-269162	A 20050915
			JP 2005-269166	A 20050915
			JP 2005-270999	A 20050916
			JP 2005-271007	A 20050916
			JP 2005-271015	A 20050916
			JP 2006-177176	T0 20060627

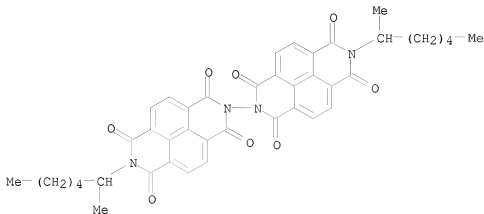
OTHER SOURCE(S): MARPAT 146:347362
 GI



- AB The invention relates to an electrophotog. photoconductor that has a layer containing a charge transport compound represented by I (R1, R2 = H, alkyl, cycloalkyl, aralkyl; R3-10 = H, halo, cyano, nitro, amino, hydroxyl, alkyl, cycloalkyl, aralkyl), and an image forming apparatus using the electrophotog. photoconductor.
- IT 866142-07-6P 929037-02-5P 929037-03-6P
 929037-04-7P 929037-05-8P
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (charge transport compound preparation; electrophotog. photoconductor with specific charge transport compound, image forming apparatus, image forming method, and process cartridge)

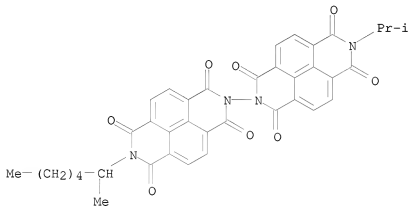
RN 866142-07-6 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



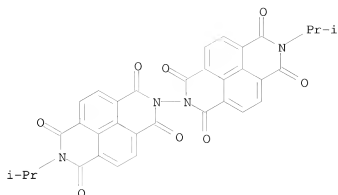
RN 929037-02-5 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-methylethyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



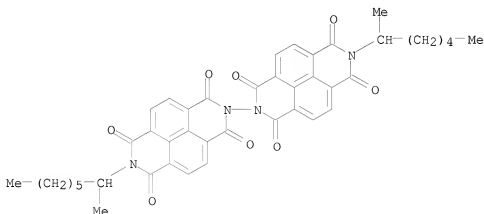
RN 929037-03-6 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7,7'-bis(1-methylethyl)- (CA INDEX NAME)



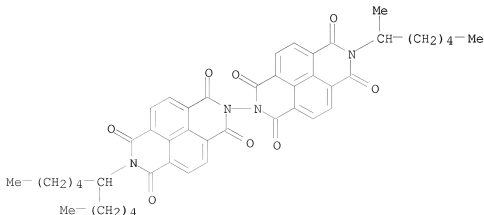
RN 929037-04-7 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylheptyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



RN 929037-05-8 CAPLUS

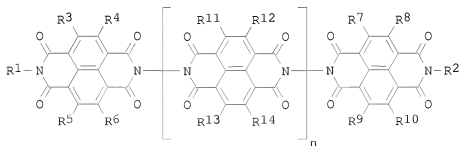
CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylhexyl)-7'-(1-pentylhexyl)- (CA INDEX NAME)



L4 ANSWER 21 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:287077 CAPLUS
 DOCUMENT NUMBER: 146:347360
 TITLE: Electrophotographic photoconductor, and image forming apparatus, process cartridge
 INVENTOR(S): Kurimoto, Eiji; Shimoyama, Keisuke; Kimura, Michio; Kawamura, Shinichi; Takada, Takeshi; Yamashita, Yasuyuki; Toda, Naohiro; Nakamori, Hideo
 PATENT ASSIGNEE(S): Japan
 SOURCE: U.S. Pat. Appl. Publ., 112pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070059618	A1	20070315	US 2006-521493	20060915
JP 2007108645	A	20070426	JP 2006-112356	20060414
JP 2007108650	A	20070426	JP 2006-129485	20060508
JP 2007108658	A	20070426	JP 2006-142964	20060523
JP 2007108659	A	20070426	JP 2006-143190	20060523
JP 2007108671	A	20070426	JP 2006-177175	20060627
JP 2007108682	A	20070426	JP 2006-200602	20060724
JP 2007264589	A	20071011	JP 2006-249827	20060914
CN 101004561	A	20070725	CN 2006-10064333	20060915
PRIORITY APPLN. INFO.:				
			JP 2005-267882	A 20050915
			JP 2005-268478	A 20050915
			JP 2005-269156	A 20050915
			JP 2005-269163	A 20050915
			JP 2005-269165	A 20050915
			JP 2005-270493	A 20050916
			JP 2005-271008	A 20050916
			JP 2006-56505	A 20060302

OTHER SOURCE(S): MARPAT 146:347360
 GI



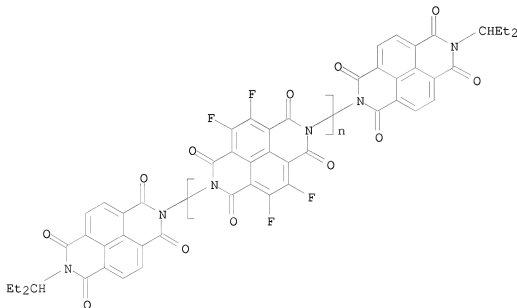
containing an electrophotog. photoconductor, a charging unit, an exposing unit, a developing unit, a transfer unit and a cleaning unit, wherein the electrophotog. photoconductor contains a support and at least a photosensitive layer disposed on the support, wherein the photosensitive layer contains a charge generating material and a compound expressed by I (R_{1,2} = H, alkyl, cycloalkyl, aralkyl group; R₃₋₁₄ = H, halogen atom, cyano group, nitro group, amino group, hydroxyl group, alkyl group which may be substituted, cycloalkyl group which may be substituted and aralkyl group which may be substituted; n = a number of replication and represents an integer of 0 to 100).

IT 929076-76-6

RL: TEM (Technical or engineered material use); USES (Uses)
(charge transporting material for electrophotog. photoconductor)

RN 929076-76-6 CAPLUS

CN Poly(4,5,9,10-tetrafluoro-1,3,6,8-tetrahydro-1,3,6,8-tetraoxobenzo[lmn][3,8]phenanthroline-2,7-diyl),
α,ω-bis[7-(1-ethylpropyl)-3,6,7,8-tetrahydro-1,3,6,8-tetraoxobenzo[lmn][3,8]phenanthroline-2(1H)-yl]- (CA INDEX NAME)



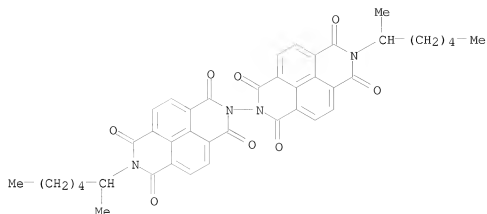
IT 866142-07-6P 929037-02-5P 929037-03-6P

929037-04-7P 929037-05-8P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of charge transporting material for electrophotog. photoconductor)

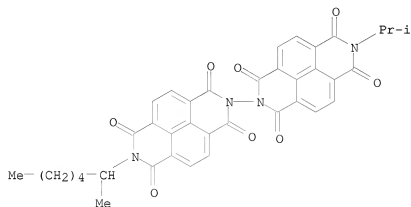
RN 866142-07-6 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[lmn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



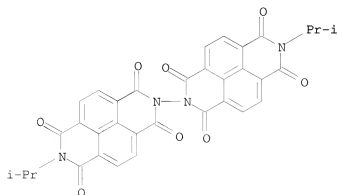
RN 929037-02-5 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylethyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



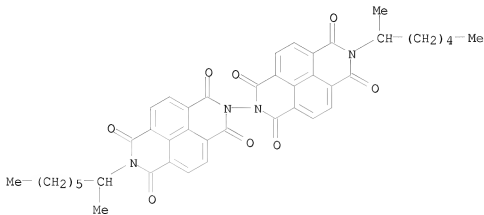
RN 929037-03-6 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-methylethyl)- (CA INDEX NAME)



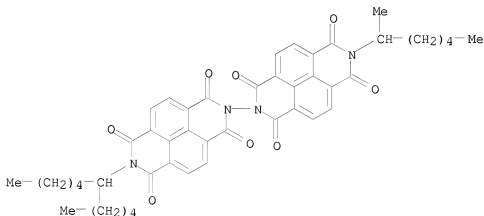
RN 929037-04-7 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[lmn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-methylheptyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



RN 929037-05-8 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[lmn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-methylhexyl)-7'-(1-pentylhexyl)- (CA INDEX NAME)

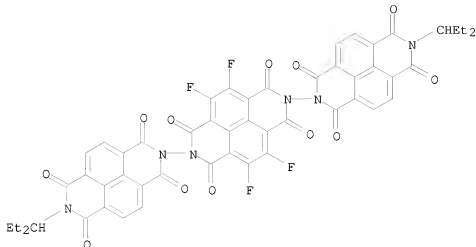


IT 929076-74-4

RL: TEM (Technical or engineered material use); USES (Uses)
(preparation of charge transporting material for electrophotog.
photoconductor)

RN 929076-74-4 CAPLUS

CN [2,2' (1H,7'H):7',2' (1''H)-Terbenzo[lmn][3,8]phenanthroline]-1,1',1'',3,3',3'',6,6',6'',8,8',8'' (7H,7''H)-dodecone, 7,7''-bis(1-ethylpropyl)-4',5',9',10'-tetrafluoro- (CA INDEX NAME)



L4 ANSWER 22 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:286729 CAPLUS

DOCUMENT NUMBER: 146:347356

TITLE: Electrophotographic image forming apparatus and process cartridge

INVENTOR(S): Shimoyama, Keisuke; Kurimoto, Eiji; Sasaki, Michitaka; Kawamura, Shin-Ichi

PATENT ASSIGNEE(S): Japan

SOURCE: U.S. Pat. Appl. Publ., 26pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070059039	A1	20070315	US 2006-519099	20060912
JP 2007108633	A	20070426	JP 2006-35965	20060214
JP 2007108636	A	20070426	JP 2006-38542	20060215
JP 2007108643	A	20070426	JP 2006-86148	20060327
JP 2007108646	A	20070426	JP 2006-114052	20060418
JP 2007108647	A	20070426	JP 2006-114054	20060418
JP 2007108649	A	20070426	JP 2006-117068	20060420
JP 2007108667	A	20070426	JP 2006-170879	20060621
CN 1932663	A	20070321	CN 2006-10151862	20060913
PRIORITY APPLN. INFO.:				JP 2005-264722
				A 20050913
				JP 2005-266245
				A 20050914
				JP 2005-267953
				A 20050915
				JP 2005-267955
				A 20050915
				JP 2005-269167
				A 20050915
				JP 2005-271006
				A 20050916
				JP 2005-271016
				A 20050916

OTHER SOURCE(S): MARPAT 146:347356

AB An electrophotog. image forming apparatus, including a photoreceptor, a charger charging the surface of the photoreceptor, an irradiator irradiating the surface of the photoreceptor with imagewise light to form an electrostatic latent image thereon, an image developer developing the electrostatic latent image with a developer including a toner to form a toner image on

the surface of the photoreceptor, and a transferer transferring the toner image onto a transfer material, wherein the photoreceptor includes an electroconductive substrate, and a photosensitive layer overlying the electroconductive substrate and including a charge generation material and a specific charge transport material.

IT 866142-07-6P 929037-02-5P 929037-04-7P

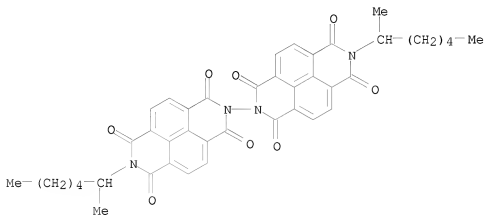
929202-09-5P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(electrophotog. image forming apparatus and process cartridge)

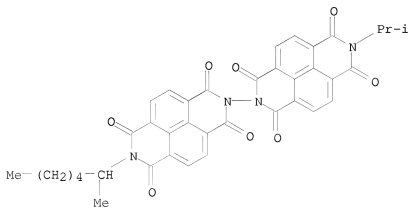
RN 866142-07-6 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



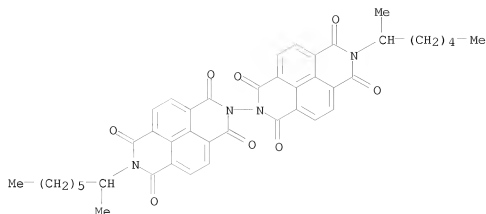
RN 929037-02-5 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-methylethyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



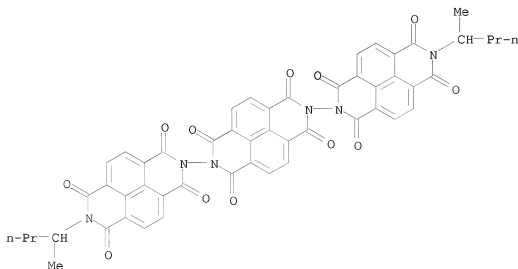
RN 929037-04-7 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-methylheptyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



RN 929202-09-5 CAPLUS

CN [2,2'(1H,7'H):7',2''(1''H)-Terbenzo[lmn][3,8]phenanthroline]-
 1,1',1'',3,3',3'',6,6',6'',8,8',8''(7H,7''H)-dodecone,
 7,7''-bis(1-methylbutyl)- (CA INDEX NAME)



L4 ANSWER 23 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:76436 CAPLUS

DOCUMENT NUMBER: 147:531344

TITLE: Development of new electron transport material with
 high drift mobility
 AUTHOR(S): Fujiyama, Takahiro; Sugimoto, Ken-ichi; Sekiguchi,
 Michiru

CORPORATE SOURCE: Material Science Laboratory, Mitsui Chemicals, Inc.,
 580-32 Nagaura, Sodegaura, Chiba, 299-0265, Japan

SOURCE: Nippon Gazo Gakkaishi (2006), 45(6), 521-525

CODEN: NGGAFI; ISSN: 1344-4425

PUBLISHER: Nippon Gazo Gakkai

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We have developed new electron transport materials, which have the structure of naphthalene-tetracarboxylic diimide. These compds. showed good compatibility to a polycarbonate and good solubility in common organic solvents. Electron transport properties of these compds. were investigated by the conventional time-of-flight method. Electron drift mobilities have been measured as a function of the concentration and elec. field.

The values of electron mobility ranged from 10^{-8} to 10^{-4} cm²/Vs as the mol. concentration was varied from 20 to 60 wt%. These mobilities are comparable

to hole mobility of triphenylamine derivative, TPD.

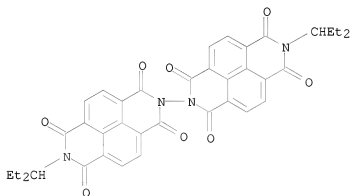
IT 866142-05-4P 866142-06-5P 956592-52-2P

956592-53-3P 956592-54-4P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(development of new electron transport material with high drift mobility)

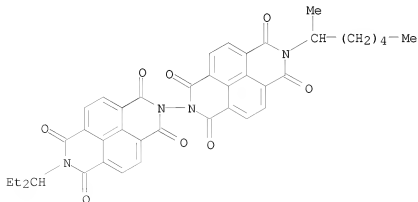
RN 866142-05-4 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-ethylpropyl)- (CA INDEX NAME)



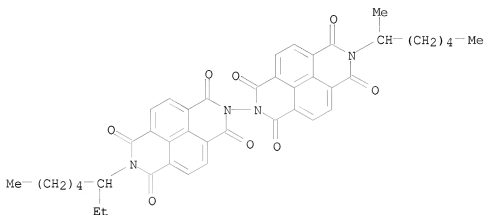
RN 866142-06-5 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-ethylpropyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



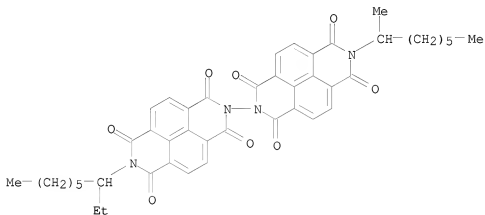
RN 956592-52-2 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-ethylhexyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



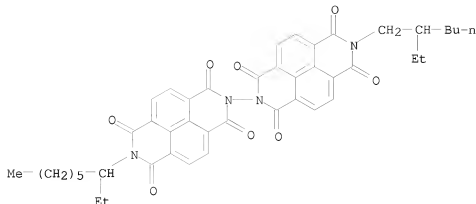
RN 956592-53-3 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-ethylheptyl)-7'-(1-methylheptyl)- (CA INDEX NAME)



RN 956592-54-4 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-ethylheptyl)-7'-(2-ethylhexyl)- (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 24 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:1025348 CAPLUS

DOCUMENT NUMBER: 147:375145

TITLE: New electron transport materials with high drift mobility comparable to hole-transporting materials
Fujiyama, Takahiro; Sugimoto, Ken-ichi; Sekiguchi, Michiru

CORPORATE SOURCE: Material Science Laboratory, Mitsui Chemicals, Inc., Chiba, Japan

SOURCE: NIP21, Final Program and Proceedings [of the] International Conference on Digital Printing Technologies, 21st, Baltimore, MD, United States, Sept. 18-23, 2005 (2005), 6-8. Society for Imaging Science and Technology: Springfield, Va.
CODEN: 69ILZX; ISBN: 0-89208-257-7

DOCUMENT TYPE: Conference

LANGUAGE: English

AB New electron transport materials having the following general structure were developed. We synthesized them and examined their properties. These compds. showed good compatibility to a polycarbonate and good solubility in common organic solvents. Electron transport properties of these compds. were investigated. Electron drift mobilities were measured as a function of the concentration and elec. field by the conventional time-of-flight technique. They showed nondispersive electron transport in composition films. The values of electron mobility ranged from 10^{-8} to 10^{-4} cm²/Vs as the mol. concentration was varied from 20 to 60%.

IT 866142-04-3 866142-05-4 866142-06-5

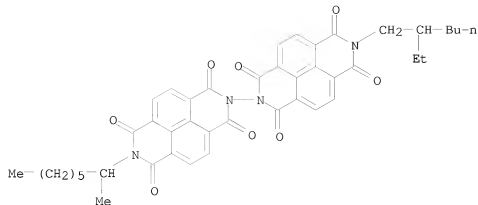
866142-07-6 949534-66-1

RL: TEM (Technical or engineered material use); USES (Uses)

(new electron transport materials with high drift mobility comparable to hole-transporting materials and good dispersibility and solubility in organic solvents)

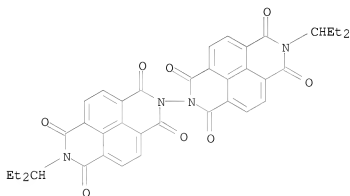
RN 866142-04-3 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(2-ethylhexyl)-7'-(1-methylheptyl)- (CA INDEX NAME)



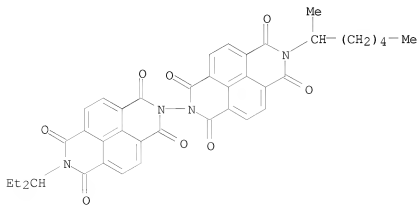
RN 866142-05-4 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-ethylpropyl)- (CA INDEX NAME)



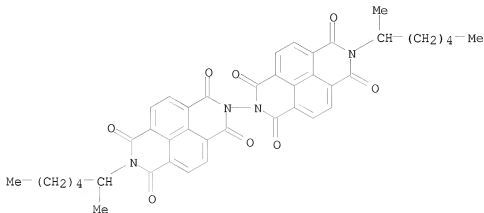
RN 866142-06-5 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-ethylpropyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



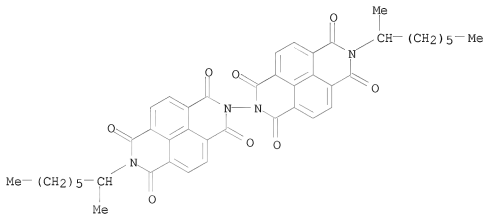
RN 866142-07-6 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



RN 949534-66-1 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7,7'-bis(1-methylheptyl)- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 25 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:99880 CAPLUS

DOCUMENT NUMBER: 144:180728

TITLE: Tetracarboxylic diimide derivatives and their electrophotographic photoconductors with high sensitivity

INVENTOR(S): Sugimoto, Kenichi; Fujiyama, Takahiro

PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.

CODEN: JKXXAF

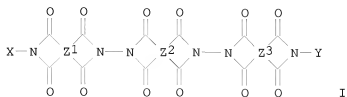
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006028027	A	20060202	JP 2004-204929	20040712
PRIORITY APPLN. INFO.:				
OTHER SOURCE(S):		MARPAT 144:180728	JP 2004-204929	20040712
GI				



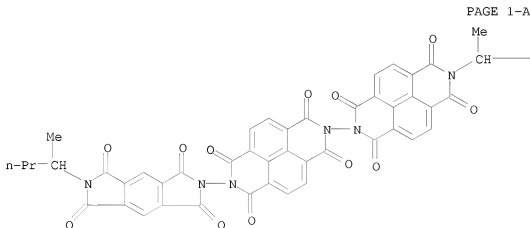
AB The derivs. are I [X, Y = H, aryl, (cyclo)alkyl, aralkyl; Z1-Z3 = tetravalent organic group]. Electrophotog. apparatus equipped with the photoconductors are also claimed. The derivs., useful as electron transporting agents, show good dispersibility in binder resins.

IT 874762-49-9 874762-50-2

RL: DEV (Device component use); USES (Uses)
(tetracarboxylic diimide derivs. as electron transporting agents showing good dispersibility in binder resins for electrophotog. photoconductors with high sensitivity)

RN 874762-49-9 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1-methylbutyl)-7'-[3,5,6,7-tetrahydro-6-(1-methylbutyl)-1,3,5,7-tetraoxobenzo[1,2-c:4,5-c']dipyrryl-2(1H)-yl]- (CA INDEX NAME)



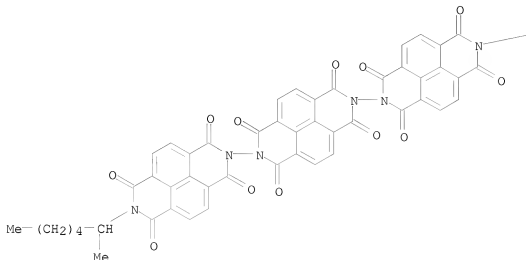
PAGE 1-B

— Pr-n

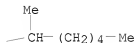
RN 874762-50-2 CAPLUS

CN [2,2' (1H, 7'H):7', 2'' (1''H)-Terbenzo[lmn][3,8]phenanthroline]-
1,1',1'',3,3',3'',6,6',6'',8,8',8'' (7H, 7''H)-dodecane,
7,7''-bis(1-methylhexyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L4 ANSWER 26 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:1075805 CAPLUS
 DOCUMENT NUMBER: 143:376388
 TITLE: Novel compounds and organic electronic devices
 INVENTOR(S): Fujiyama, Takahiro; Sugimoto, Kenichi; Sekiguchi, Michiru
 PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Japan
 SOURCE: PCT Int. Appl., 106 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

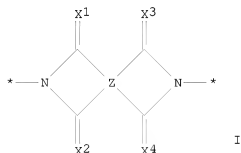
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005092901	A1	20051006	WO 2005-JP5979	20050329
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,				

AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1736476	A1	20061227	EP 2005-727671	20050329
R: DE, FR, GB, NL				
CN 1938321	A	20070328	CN 2005-80010086	20050329
US 20070219375	A1	20070920	US 2006-594156	20060926
KR 2006134167	A	20061227	KR 2006-721674	20061019
KR 861434	B1	20081002		

PRIORITY APPLN. INFO.: JP 2004-94088 A 20040329
 JP 2004-277461 A 20040924
 JP 2004-351088 A 20041203
 WO 2005-JP5979 W 20050329

OTHER SOURCE(S): MARPAT 143:376388
 GI

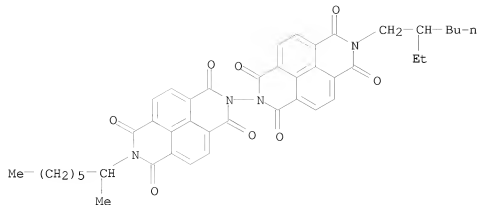


AB Disclosed are comps. having a structure wherein constitutional units represented by the general formula I (X1-4 = O, S, NR; R = H, monovalent organic moiety; Z = tetravalent organic moiety, and * represents a bonding position) are bonded to one another without the intermediary of a linking group. Also disclosed are organic electrophotog. photoreceptors, organic thin film transistors, organic electroluminescent display devies, and organic solar cells.

IT 866142-04-3P 866142-05-4P 866142-06-5P
 866142-07-6P 866142-08-7P 866142-09-8P
 866142-10-1P 866142-12-3P 866142-13-4P
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (synthesis and use as electron transporting agents for electrooptical devices)

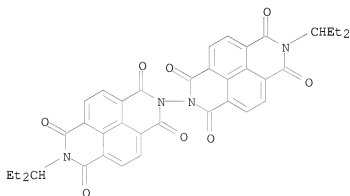
RN 866142-04-3 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[lmn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(2-ethylhexyl)-7'-(1-methylheptyl)- (CA INDEX NAME)



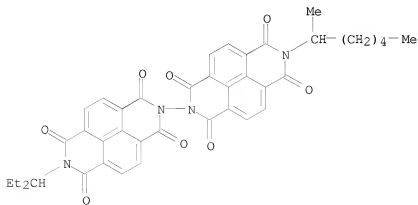
RN 866142-05-4 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-bis(1-ethylpropyl)- (CA INDEX NAME)



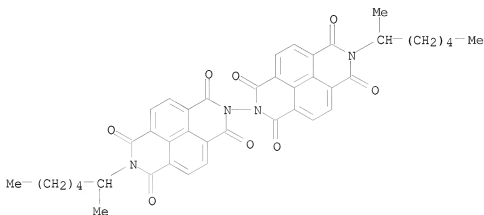
RN 866142-06-5 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-ethylpropyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



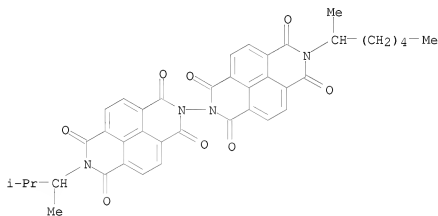
RN 866142-07-6 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7,7'-bis(1-methylhexyl)- (CA INDEX NAME)



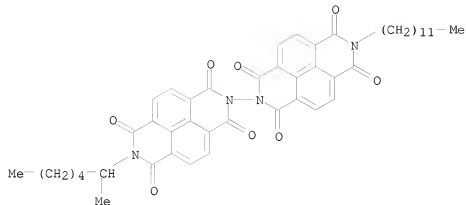
RN 866142-08-7 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-(1,2-dimethylpropyl)-7'-(1-methylhexyl)- (CA INDEX NAME)



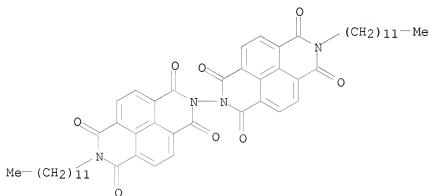
RN 866142-09-8 CAPLUS

CN [2,2' (1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8' (7H,7'H)-octone, 7-dodecyl-7'-(1-methylhexyl)- (CA INDEX NAME)



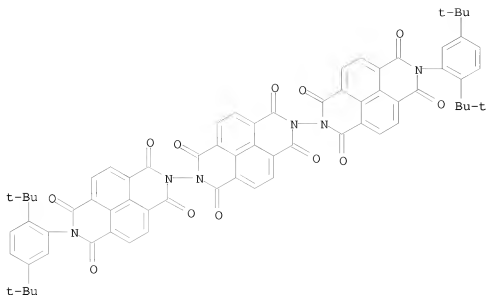
RN 866142-10-1 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[1mn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7,7'-didodecyl- (CA INDEX NAME)



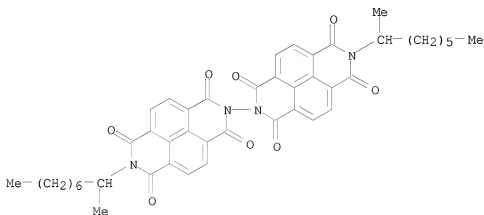
RN 866142-12-3 CAPLUS

CN [2,2':7',2''(1H,1''H)-Terbenzo[1mn][3,8]phenanthroline]-1,1',1'',3,3',3'',6,6',6'',8,8',8''-(7H,7''H)-dodecone, 7,7''-bis[2,5-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)



RN 866142-13-4 CAPLUS

CN [2,2'-(1H,1'H)-Bibenzo[lmn][3,8]phenanthroline]-1,1',3,3',6,6',8,8'-(7H,7'H)-octone, 7-(1-methylheptyl)-7'-(1-methyloctyl)- (CA INDEX NAME)



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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10/594,156

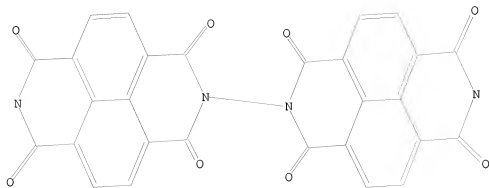
L4

26 S L3

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

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